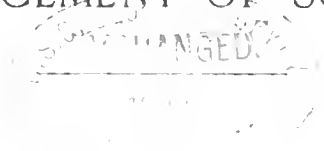


# GUIDE TO WASHINGTON AND ITS SCIENTIFIC INSTITUTIONS

AMERICAN ASSOCIATION FOR THE  
ADVANCEMENT OF SCIENCE



FORTIETH MEETING, AUGUST, 1891

PUBLISHED BY THE LOCAL COMMITTEE



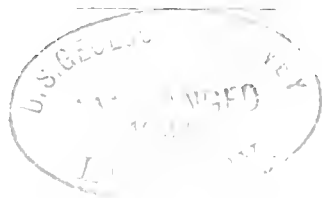
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PRESS OF GEDNEY & ROBERTS,  
WASHINGTON, D. C.

## The District of Columbia.

THE District of Columbia is the permanent seat of government of the United States, and Washington is the capital city within its bounds. Its exact site was chosen by President Washington in accordance with a resolution passed by Congress July 10, 1790, which specified that the location should be upon the banks of the Potomac river between certain limits. This choice was reached after a heated sectional contest, and conformed to the declaration that "the site of the future capital should be as near as possible the centre of wealth, of population, and of territory."

The District was originally ten miles square ; its centre was very near the spot occupied by the Washington Monument, and jurisdiction was ceded to the general government by the States of Maryland and Virginia. The boundaries of the District as originally defined are shown upon the accompanying geological map. When the site was chosen Georgetown had been a thriving trading point, with extensive foreign commerce, for nearly a hundred years, and Alexandria was also a prominent settlement, but the ground occupied by the present City of Washington was for the most part unimproved.

## The City of Washington.

THE ground plan of the capital is the work of Major L'Enfant, a young French engineer residing in Philadelphia, chosen by Washington for this purpose. The plan was made after a careful study of the physiography of the District, and shows a wonderful appreciation of the requirements of the capital of a great nation.

The Capitol is the centre of this plan. The north and south and east and west lines passing through that building divide the city into four quarters. Either side from the meridian line the streets are numbered : First street, Second street, etc. Each way from the east-west line the streets are named in order from the alphabet : A street, B street, etc. Besides the lettered and numbered streets there are many avenues, named after states of the Union. These avenues run in directions diagonal to the streets and are so arranged that several of them intersect at certain important points—as at the White House and at the Capitol.

The streets and avenues of the city are so wide (80 to 160 feet) that in most cases only the central part is used for pavement and sidewalks, leaving a strip on either side which holders of adjoining property are allowed to improve with flowers, shrubs and trees, but may not encroach upon with buildings.

The largest park within the city limits is that known as the Mall, which lies between the Capitol and the Washington Monument. In various divisions of this park are situated the Smithsonian Institution, the National Museum, and other scientific bureaus and museums. (See map). Between the White House grounds and the Monument is the President's Park, commonly known as the "White Lot."

Within a few years the park area of the city will be more than doubled by the improvement of the grounds now being reclaimed, by dredging and filling, from the malarial flats of the river. This land adjoins the Mall on the west and extends southward to a point opposite the Arsenal grounds.

One of the most beautiful features of the city is the great number of small parks, most of them situated at points of intersection of several avenues, while in other cases one or more squares are thus occupied. Perhaps the most beautiful of these small parks is Lafayette Square, situated in front of the White House, between Pennsylvania avenue and H street, and surrounded by houses with which many events of historic interest are connected. It contains a great variety of beautiful trees, many of them exotics. In the centre of this park is an equestrian statue of Andrew Jackson, seventh President of the United States. At the southeastern corner of the park is the monument recently erected to the memory of Lafayette and his compatriots, Count de Rochambeau and Chevalier Duportail, of the French army, and Counts D'Estaing and De Grasse, of the French navy, who served as allies in the closing years of the Revolutionary war. The statue, which was ordered by Congress at a cost of \$50,000, was designed by the French artists, Falguière and Mercie.

On Vermont avenue are three pretty parks. McPherson Square, situated between I and K streets, contains an equestrian statue to General J. B. McPherson, erected by the Society of the Army of the Tennessee. Two blocks further up Vermont avenue, at the intersection of Massachusetts avenue, is Thomas Circle, in the centre of which is a statue of General George H. Thomas, erected by the Society of the Army of the Cumberland. Two blocks still further out Vermont avenue is Iowa Circle.

On Connecticut avenue, which leads off in a northwesterly direction from Lafayette Square, is Farragut Square, between I and K streets. In this is a statue of Admiral David G. Farragut. Four blocks up the avenue is Dupont Circle, in the centre of which is a statue to Rear Admiral Samuel F. Dupont.

In Scott Circle, at the intersection of Sixteenth street and Massachusetts avenue, stands an equestrian statue of General Winfield Scott.

On East Capitol street, in the eastern section of the city, is the fine Lincoln Park, with a statue representing the emancipation of the slave.

Besides the parks above mentioned the visitor will find many others, at short intervals, on nearly all the principal avenues of the city. The grounds about the Naval Observatory, the Arsenal, and at the Congressional Cemetery are also improved as parks.

The Botanical Gardens are situated on Pennsylvania avenue, between First and Third streets. They cover ten acres of ground, and are beautifully laid out with trees, shrubs and flowers. They may be considered as forming a part of the Mall, although enclosed by an iron railing. Admission may be had between 9 a. m. and 6 p. m. every day except Sunday. The grounds and greenhouses are well worth a visit.

### The Zoological Park.

THE grounds of the new Zoological Park in the near suburbs of the city lie on both sides of Rock Creek, just north of Woodley lane. They comprise 166 acres. The land was purchased by Act of Congress in 1889 at a cost of nearly \$200,000. Already the park is enclosed, and several structures suitable for the use of the animals have been erected. A considerable number of North American animals have been placed in their new home, and an excellent nucleus started for a national zoological garden. A number of the larger Rocky Mountain animals have been captured in the Yellowstone National Park, and will be transferred to Washington for the Zoological Park early in the autumn.

The park is most picturesquely located and admirably adapted for its purpose. It is under the direction of the Smithsonian Institution.

### The Capitol.

THE Capitol as it now stands is the result of several additions to and changes of the original building. The central part, exclusive of the dome, represents the original design by Mr. Stephen Hallet. The two wings of this part, erected in 1793-1811, were destroyed by the British in 1814, but were soon rebuilt with the connecting portion and a wooden dome. The extensions on the north and south, containing the present legislative chambers, were added 1851-1867, after the plans of Mr. Thomas U. Walter, and the great iron dome, by the same architect, was completed in 1863.

The length of the building is 751 feet, its greatest width 320 feet, and the dome rises 307 feet above the foundation.

In the different facades of the Capitol are 134 beautiful Corinthian columns, 100 of them monolithic. The material of the new wings is white marble, that of the older part sandstone.

At the eastern front of the building, flanked by a double row of columns, is a portico 160 feet long, upon which most of the Presidents have been inaugurated.

The Capitol contains the legislative chambers of the Senate and of the House of Representatives, the United States Supreme Court Room and Congressional Library.

The rotunda of the Capitol is 96 feet in diameter at its base, and 185 feet high, to a canopy 65 feet in diameter. In the rotunda are eight large paintings by American artists, four of them commemorating events in the discovery and settlement of the country, and four representing scenes in the Revolutionary war. The frieze, 10 feet in height, is likewise historical in character. In the canopy is an allegorical fresco, the apotheosis of Washington, by Brumidi, who also began the frieze.

From the rotunda one can ascend to the dome and to the cupola above, from which a beautiful view of the city may be obtained. The dome is crowned by a bronze statue of the Goddess of Freedom, by Crawford, an American sculptor. The dome is 135 feet 5 inches in diameter at its base.

At the entrance to the rotunda from the eastern portico is a bronze door representing in its relief figures the history of Columbus and his discoveries. There are also heads of many sovereigns and discoverers whose names are associated with the discovery of America, and of historians who have written upon the subject. The door was designed by Randolph Rogers, in 1858. Another fine bronze door is at the eastern entrance to the Senate wing. This was designed by Crawford, and was cast at Chicopee, Massachusetts.

The assembly halls of the Senate and of the House of Representatives, and the rooms connected with them, are ornamented with many frescoes, paintings, and artistic decorations. Attention is especially called to two large paintings by Thomas Moran, situated in the vestibule to the ladies' gallery of the Senate chamber. One of these represents the "Grand Cañon of the Yellowstone," and the other the "Grand Cañon of the Colorado." Both are well worthy of study. Among the miscellaneous paintings which adorn the halls and galleries are "Westward Ho," by Leutze, and the "Signing of the Declaration of Independence."

Between the rotunda and the House wing of the building is the National Hall of Statuary. To this collection each State of the Union has been invited to contribute two statues of prominent citizens. Many of them have already done so.

## The White House.

THE Executive Mansion, or White House, is situated in a park between the Treasury and the State, War and Navy buildings. It was erected in 1792-1799, after the designs of Mr. James Hoban, and is said to be similar to the palace of the Duke of



Leinster, in Dublin. Its popular name is said to have its origin in the fact that for a long time after its completion it was the only white building in the city.

The largest of the reception rooms is open to visitors from 10 a. m. to 3 p. m. Concerts by the Marine Band are given at 6 o'clock every Saturday afternoon during the summer in the grounds south of the White House.

## The Washington Monument.

THE Washington Monument stands on the bank of the Potomac river south of the White House, very near the spot designated by Major L'Enfant in the original plan of the city for an equestrian statue to the memory of Washington. It is also very near the centre of the original District of Columbia.

The designer of the Monument was Robert Mills, of South Carolina. Its erection was begun in 1847, but was interrupted in 1855, when it had reached a height of 152 feet, through failure of funds, which had thus far been contributed by private individuals. Work was resumed in 1878 under appropriations made by Congress. The capstone was put in place December 6, 1884, and the dedication took place on February 21, 1885, with imposing Masonic ceremonies. Robert C. Winthrop, of Massachusetts, was the orator both at the laying of the cornerstone and at the dedication. The total cost of the Monument has been \$1,200,000, of which \$300,000 was raised by contributions from the people.

The shaft is of Vermont marble. Its original foundation was 80 feet square at the base, 55 feet square at the top and 25 feet high, 17 feet above the surface. When work was resumed in 1878 it was found advisable to enlarge the foundation, and a mass of concrete 126½ feet square and 13½ feet in thickness was placed under the original foundation, a noteworthy feat of engineering. The engineer in charge of the work from 1878 to the completion of the Monument was Col. (now Gen.) Thomas L. Casey.

The Monument is 555 feet in height, 55 feet square at the base, and 31½ feet square at the base of the summit pyramid, which is 55 feet high. The apex of the pyramid is a solid block of aluminum 9 inches high, 4½ inches square at the base and weighing 6¼ pounds. The total weight of the Monument is 80,000 tons. At the time of its completion this shaft was the highest building in the world. It is now (1891) surpassed only by the Eiffel Tower in Paris.

By means of an elevator one can ascend to a landing at the base of the summit pyramid, and through port holes obtain magnificent views of the city and surrounding country. By walking down the iron staircase one can see the numerous memorial tablets set in the walls, contributed by various nations, states, cities, societies, corporations and individuals.

The elevator ascends at the even hour and half hour. The Monument is open every week day from 9 a. m. to 5.30 p. m.

### The Corcoran Art Gallery.

SITUATED on Pennsylvania avenue, corner of Seventeenth street, opposite the State, War and Navy Departments. This Gallery was founded and endowed by W. W. Corcoran, a citizen of Washington. The present building was erected in 1859. The two bronze lions at the main entrance are copies of Cantora's at the tomb of Pope Clement XIII. It has one of the best collections of paintings in this country, and is constantly being enriched by purchase. Connected with the Gallery is a school of art. Unfortunately the Gallery is closed for repairs during August.



# The Departments and Scientific Institutions.

## Building of the State, War and Navy Departments.

THIS massive structure stands on the south side of Pennsylvania avenue just west of the White House. It is built in Italian Renaissance style, and was begun in 1871 and completed in 1887, from designs by Mr. A. B. Mullett, late supervising architect of the Treasury. The stone is granite, from Maine and Virginia. The State Department occupies the southern portion of the building; the War Department the northern and western, and the Navy Department the eastern wing. Many of the rooms are richly frescoed and decorated, and contain numerous portraits, historical relics and other objects of interest.

### State Department.

Honorable JAMES G. BLAINE, Secretary of State.

The Department is open from 9 a. m. to 2 p. m. On the third floor is an excellent library for the purposes of the Department. The original Declaration of Independence is exhibited in the library with other historical documents, many of them relating to the early days of the country.

### War Department.

Honorable REDFIELD PROCTOR, Secretary of War.

Many of the rooms and corridors are adorned with portraits of distinguished generals, most of which may be seen by applying to the messenger at the Secretary's door.

*Headquarters of the Army.* Major-General John M. Schofield, Commanding. The office is located in the north wing at the east end of the corridor.

*Corps of Engineers.* Brigadier-General Thomas L. Casey, Chief of Engineers. The Corps of Engineers are charged with all duties relating to fortifications; with torpedoes for coast defenses; with all military bridges; and such services as may be required for these objects. It is also charged with the harbor and river improvements.

*Ordnance Bureau.* Brigadier-General D. W. Flagler, Chief of Ordnance. The Bureau of Ordnance has charge of all the national armories, gun factories, arsenals and ordnance depots, and is expending large sums of money in the manufacture of modern guns.

## The Army Medical Museum and Library.

THE Army Medical Museum occupies a portion of the new building erected at the northwest corner of Seventh and B streets southwest, east of the National Museum. The rest of the building is occupied by the Library of the Surgeon-General's Office, a portion of the Record and Pension Division of the War Department, and the Laboratory. The Museum was removed in 1887 from the building formerly known as Ford's Theater (Nos. 509 and 511 Tenth street northwest.)

The Museum was founded and a large portion of the medical and surgical specimens collected during the war of the rebellion. Since the close of the war, however, the officers in charge have continued to collect specimens from the medical officers of the army at the several military posts, and a number of valuable specimens have been contributed by physicians engaged in private practice.

At the close of the fiscal year terminating June 30, 1891, the Museum contained about 10,135 pathological specimens, 3,314 anatomical specimens, 11,500 microscopical specimens, and 1,717 specimens of comparative anatomy. It was visited last year by more than 42,000 persons.

This collection is richer in specimens illustrative of the results of gun-shot wounds, and of the surgical operations which they necessitate than any other collection in the world. In other departments, though it does not equal some of the wealthy and long established museums of Europe, its collections are, nevertheless, by far the most important in America, and are annually increasing in extent and value.

The Library of the Surgeon-General's Office, which occupies a portion of the same building, is the largest and most valuable medical library in the world. At the close of the fiscal year terminating June 30, 1891, it contained about 100,000 books and 150,000 pamphlets, and the number is steadily increasing. Medical men from any part of the country desirous of consulting the works in this library are courteously welcomed and granted free access.

Both the Museum and Library are open to visitors daily, except Sundays, from 9 a. m. to 4 p. m. The Seventh-street Cable Road, which connects with the principal street railroads, carries visitors direct to the Museum.

## Navy Department.

Honorable BENJAMIN F. TRACY, Secretary of the Navy.

The Chiefs of the Bureaus of the Navy Department are officers of the United States Navy and part of the Naval establishment. Upon the walls of the Secretary's office are hung some excellent portraits of former secretaries; in the corridors are to be seen some fine models of the new cruisers. The Library is on the fourth floor.

## Naval Observatory.

Captain S. V. MCNAIR, U. S. N., Superintendent.

The Observatory is situated on the corner of Twenty-fourth and D streets Northwest. It was established in 1842, its object being to promote the ends of navigation. The Observatory is equipped with a 26-inch equatorial mural circle and transit and a prime transit for declinations, and many other notable instruments. Astronomical observations are made in order to establish and correct the data used by the navigator, and all the instruments connected with navigation are tested in this office. Connected with the Observatory is a corps of astronomers of national reputation. The results of the investigations are published annually under the title of "Washington Observations." The Observatory is open to the public on all work-days from 9 a. m. to 4 p. m. A new observatory is being built one mile north of Georgetown, but it is not yet ready for occupancy. It has an excellent position, admirably chosen for its purposes. The grounds surrounding the building embraces about 60 acres.

## Nautical Almanac.

Prof. SIMON NEWCOMB, U. S. N., Superintendent.

The Nautical Almanac Office is situated at the northwest corner of Pennsylvania avenue and Nineteenth street; entrance, No. 810 Nineteenth street. A regular staff of ten assistants is employed in this office.

<i>Annual Publications :</i>	{	The American Ephemeris and Nautical Almanac.
	{	The American Nautical Almanac.
	{	The Atlantic Coasters Nautical Almanac.
	{	The Pacific Coasters Nautical Almanac.
<i>Publications issued at irregular intervals :</i>	{	Astronomical Papers of The American Ephemeris.

## U. S. Hydrographic Office.

Lieutenant-Commander RICHARDSON CLOVER, U. S. N., Hydrographer.

A branch of the Bureau of Navigation, Navy Department. Offices in the Department building, basement, east front.

Work consists essentially in the supplying to vessels of war and the merchant-marine of charts, sailing directions, light lists, publications relating to marine meteorology, and other information. The object of the office is to secure the earliest possible reliable information from all sources and to put it promptly before those especially interested in navigation.

Branch offices are established in nine of the principal ports of the United States ; each of these is in the charge of a naval officer, with one or more assistants. In this way information is readily collected and promptly circulated.

The Office is divided into the following divisions :

First.—*Chart Construction.* In charge of the actual engraving of charts. Here can be seen every step in the process, from the time the working sheets are received from the surveying vessels until the final chart is printed from the copperplate. About 60 new nautical chart-plates are produced every year, and about 30,000 charts are printed from copperplates.

Second.—*Issue and Supply.* In charge of the issuing and supplying of charts to naval and other vessels. A supply of every chart likely to be required is kept on hand. Including lithographed charts, the office itself issues 863 different charts, about 10,000 copies being sold per year and 7,000 issued to U. S. Naval vessels.

Third.—*Sailing Directions.* This division has general charge of the archives of the office (where all original data are kept, copies of every chart ever issued by any office and now in actual use, and a copy of every chart ever issued by the Hydrographic Office) ; the preparation and publication of sailing directions for various oceans ; the publication and correction of the six volumes of light lists (lists of light-houses) ; and the weekly Notices to Mariners, a pamphlet containing mention of all corrections and changes in charts and other publications (circulation about 1,000 copies per week, not counting the reprints of various paragraphs).

Fourth.—*Marine Meteorology.* In charge of the general subject of climate, weather, storms, currents, best sailing and steam routes, etc. The monthly Pilot Chart of the North Atlantic Ocean, the weekly Hydrographic Bulletin, and occasional treatises on storms of various oceans are prepared and published by this division, which has a corps of about 1,000 voluntary observers who take daily observations and send in their reports from every port. The Pilot Chart has a monthly circulation of 3,300 copies, and is supplied free to the voluntary observers in return for their observations. It contains a forecast for the month succeeding the day of issue and a review of the

preceding month, showing graphically the direction and force of prevailing winds, the tracks of storms, positions and tracks of derelict vessels, ice, buoys, and other obstructions to navigation.

Fifth.—*Mailing Division.* This has charge of the correspondence with the branch offices and the mailing of all publications.

## U. S. Navy Yard.

Commodore J. S. SKERRETT, U. S. N., Commandant.

The Navy Yard is situated on the Anacostia river, southeast of the Capitol. It is reached by the Washington and Georgetown Railroad in cars marked "Navy Yard"; time from Lafayette Square to the Navy Yard, about 35 minutes. It was formerly a ship-yard and many famous vessels were built there. It is now entirely devoted to the construction of modern ordnance, and its various shops are amply equipped with the best modern machinery for the manufacture of large guns. There is a museum of interesting articles in the Yard. The Navy Yard is open to visitors from 7 a. m. until sundown.

## U. S. Marine Barracks.

THE Marine Barracks is the long row of buildings on the ground facing Eighth street, two squares north of the Navy Yard. In the armory on the south side are found some interesting old relics.

## Treasury Department.

Honorable CHARLES FOSTER, Secretary.

The Treasury Department stands on Fifteenth street, east of the White House. This building, of Grecian Ionic style of architecture, is, like the Capitol, the result of extensions of the original plan. Mr. Thomas U. Walter was in both cases the architect of the extensions, and produced a very harmonious effect. The old part of the building fronts on Fifteenth street, while the extensions form the northern, western and southern fronts. The original portion of the building is of Virginia sandstone, while the stone employed in the extensions is granite from Dix Island, Maine.

Any one visiting the Treasury should not fail to examine the columns of the new portions, as they are monoliths, 31 feet high and nearly 4 feet in diameter. The main objects of interest are the United States Treasury or Cash Room, the Vaults, and the Secret Service Bureau. The Cash Room is ornamented with beautiful marbles from various places. Open to visitors from 9 a. m. to 2 p. m. A guide is sent with visitors to all places open to the public.

## United States Mint.

Dr. E. O. LEECH, Director.

The Office of the Director of the Mint is in the Treasury Building. The Director has general supervision of all mints and assay offices, the purchase of silver bullion, and the allotment of its coinage. Two annual reports are published, one upon the operations of the mints and assay offices, and a second upon the statistics of the production of the precious metals in the United States. The report for the calendar year 1890 bears the date of February 26, 1891.

## United States Coast and Geodetic Survey and Office of Standard Weights and Measures.

Dr. T. C. MENDENHALL, Superintendent.

The Coast and Geodetic Survey is a bureau under the Treasury Department. Its work, begun in 1817, was almost immediately stopped by legislation, but was resumed in 1832 under the direction of Hassler, its first superintendent. He was succeeded by Bache, under whom the Survey reached a fuller development on the plans proposed by his predecessor.

Its objects are primarily to make surveys of the coast and the adjacent waters, and to collocate these surveys by extended trigonometric operations along the coasts and across the interior. It is also charged by law with the duty of furnishing trigonometric points to the several States.

The extent of the surveyed and unsurveyed shore line is estimated at about 145,000 kilometers.

In addition to its mensurational work, which is of the highest degree of precision, the Survey conducts pendulum observations, tidal researches and a general magnetic survey of the whole territory of the United States. The office of the U. S. Standard of Weights and Measures is also under the direction of the Superintendent, and furnishes standards to the several States and verifies weights and measures.

The publications of the Survey are :

*Annual Reports*, showing progress and containing professional papers.

*Charts* on various scales, covering the coast line, for the use of navigators.

*Coast Pilot*, a series of volumes giving minute descriptions of the coast, with sailing directions.

*Tide Tables*, giving the predicted tides at the chief ports of the United States.

*Professional and scientific papers*, published separately from the annual reports, but also contained in them.

*Bulletins*, giving early results of work accomplished.



*Notices to Mariners*, giving new data in regard to published charts.

The Charts, Tide Tables and Coast Pilot can be purchased at the Coast and Geodetic Survey Office, or at agencies existing in the principal seaport towns, at about the cost of paper and printing.

The other publications are for gratuitous distribution.

The office is located on New Jersey avenue, near B street southeast, just south of the Capitol.

### **Bureau of Engraving and Printing.**

WILLIAM M. MEREDITH, Chief of Bureau.

This Bureau occupies a large brick building situated on the corner of Fourteenth and B streets southwest, a short distance from the Department of Agriculture. Here are engraved and printed all the United States bonds, the paper money of the Government, and the internal revenue stamps. It is regarded as one of the most interesting bureaus to the general visitor. A competent guide is furnished upon application to the Superintendent of the building. Open to visitors from 9 a. m. to 2 p. m.

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### **Department of the Interior.**

HONORABLE JOHN W. NOBLE, Secretary.

This department building occupies the block bounded by F and G and Seventh and Ninth streets northwest, with the main entrance on F street. It is a massive white structure of imposing appearance; the centre is built of sandstone and the wings of white marble, resting upon a basement of granite. Under this department are gathered a large number of bureaus: the Patent Office, the Pension Office, General Land Office, Office of Indian Affairs, Bureau of Education, Commissioner of Railroads, U. S. Geological Survey, and U. S. Census.

### **United States Geological Survey.**

MAJOR J. W. POWELL, Director.

The Geological Survey is a bureau of the Department of the Interior. It was established by Act of Congress, March 3, 1879, the objects as provided for in the Act being the "classification of public lands and examination of the geological structure, mineral resources and products of the National domain." The President appointed Hon. Clarence King as first Director of the Survey. In March, 1881, Mr. King retired from the directorship and was succeeded by Maj. J. W. Powell, under whose guidance the work of the Survey has developed to its present large proportions.

On account of the extent and diversity of its operations this work is at present carried on by a number of coördinate divisions embracing nearly every department of geology and paleontology, with which are associated laboratories for the investigation of chemical and physical problems directly related to geology. The preparation of a topographical map, to serve as a basis upon which the geological features of the country are finally to be laid down, is carried on in the Division of Geography, with which is connected a large force of topographical engineers and a corps of expert lithographers. There is a Division of Mining Statistics and Technology engaged in preparing annual reports, showing for each calendar year the mineral products of the country. There is also a Division of Illustration, with which is connected a complete photographic laboratory for the reproduction of negatives taken in the field, and copying maps and drawings. The Geological Survey Library contains nearly 30,000 volumes, 42,000 pamphlets, and over 22,000 maps. The distribution of the Survey publications is in charge of the Librarian.

The office of the Geological Survey is located in the Hooe Building, No. 1330 F street northwest, where the greater part of the geological and topographical work is elaborated, the field explorations being conducted during the season in all portions of the United States. The paleontological collections and workshops are located either in the Smithsonian Institution or in the U. S. National Museum; in the latter are also the chemical and physical laboratories. There are branch offices and laboratories of the Survey in various portions of the country, where special work is being carried on by persons connected with universities and colleges. These form a very considerable portion of the scientific force.

The publications of the Survey are:

*Annual Reports.* By the Director to the Secretary of the Interior, presenting a summary of the plans and operations of the Survey, accompanied by short administrative reports from chiefs of divisions, followed by a number of scientific papers of general interest.

*Monographs.* Quarto volumes, containing the more important and elaborate publications of the Survey. Seventeen monographs have been published.

*Bulletins.* Each of these contains but one paper and is complete in itself. They are, for the most part, short articles giving the more important results of an investigation, and do not properly come under the head of Annual Reports or Monographs. Seventy-nine bulletins have been published.

*Annual Reports upon the Mineral Resources of the United States.*

The Annual Reports are for gratuitous distribution. Monographs and Bulletins are sold at about the cost of publication. A limited number of the Mineral Resources are for gratuitous distribution.

For a detailed account of the general plan and scope of the Survey and its methods of work, see the Eighth Annual Report of the Director for the year 1886-87.

## U. S. Patent Office.

Honorable W. E. SIMONDS, Commissioner.

The Patent Office was organized in its present form in 1836. It occupies certain portions of the main building on F street. As an object of interest to visitors its principal features are the simple massive architecture of the building itself, and the Model Room in the top story, where models of all patented inventions capable of being thus represented are arranged in cases, classified by subjects. The organization includes an Examining Corps with thirty-two divisions, the last two having been added recently on account of the great expansion of the work; the Issue and Gazette, Drafting, Assignment, or copying divisions, and the Scientific Library. This library may be of somewhat especial interest to scientific men. It aims to embody, as far as conditions admit, the whole literature of human industry, according to its main purpose of assistance to the examiners in their researches. It is a repository of applied, rather than of pure science. It contains about 50,000 volumes, including pamphlets, and is much used by the patent profession and by branches of the Government doing scientific work.

## U. S. Bureau of Education.

WILLIAM T. HARRIS, LL. D., Commissioner.

This Bureau is situated at the northwest corner of Eighth and G streets northwest. Its functions will be best understood when it is remembered that the Federal Government of the United States does not support or control the schools and colleges of the country. Each State has full jurisdiction over the subject of education, and the public schools are State institutions, subject entirely to State laws. The Bureau of Education is an agency with the especial function of increasing the enlightened directive power of the people with regard to their schools. This function is performed by the publication of annual and special reports, and occasional bulletins and circulars of information upon educational questions.

The material for these reports is collected by extensive correspondence with the officials in charge of State, city and county public school systems, with the presidents and principals of universities, colleges, seminaries, high schools, and other secondary schools, and with the ministers of education of foreign countries and officers and professors of foreign institutions of learning.

The Library of the Bureau contains 17,500 bound volumes, including all important pedagogical works, and 100,000 pamphlets.

## U. S. Census.

Honorable ROBERT P. PORTER, Superintendent.

The Census Office is established by act of Congress every ten years. During its short term it employs thousands of clerks, besides enumerators and special agents in all parts of the United States. The executive office is at the corner of Third and G streets northwest. The count of the population for the year 1890 was made at the Inter-Ocean Building on Ninth street, between E and F streets northwest. In this work the ingenious electric counting machines invented by Dr. Hollerith were used and may be seen in operation, together with the electric classifying system. The results thus far published are in the form of bulletins, eighty-four of which have been issued. Copies of most of these can be obtained by application at the executive office.

## Pension Bureau.

Honorable GREEN B. RAUM, Commissioner.

The administration of the enormous business of the Pension Office requires a large building. It stands by itself in Judiciary Square, between Fourth and Fifth and F and G streets northwest. It is an imposing edifice, constructed entirely of red brick ornamented with terra cotta. The inauguration balls of March 4, 1885, and March 4, 1889, were given in the central hall.

## Department of Agriculture.

Honorable J. M. RUSK, Secretary.

(Established by an Act of Congress, February 9, 1889).

The Secretary of Agriculture is charged with the supervision of all public business relating to the agricultural industry of the country. He exercises advisory supervision over the agricultural experiment stations deriving support from the National Treasury, and has control of the quarantine stations for imported and domestic cattle.

The Assistant Secretary has general control and direction of a large number of scientific divisions in charge of specialists, whose duties may be concisely expressed as follows :

The Statistician collects all information as to the principal crops and farm animals, and obtains similar information from European countries. He publishes a monthly bulletin of the statistics of the agricultural production, distribution and consumption.

The Entomologist obtains and disseminates information regarding insects, and appropriate remedies for their extirpation.

The Botanist investigates plants and grasses of agricultural value or of injurious character, and answers inquiries relating to the same, and has charge of the Herbarium.

The Chemist makes analyses of natural fertilizers, vegetable products and other materials which pertain to the interests of agriculture.

The Ornithologist investigates the economic relations of birds and mammals, and recommends measures for the preservation of those species beneficial to crops and the destruction of injurious species.

The Director of the Office of Experiment Stations secures, as far as practicable, uniformity of methods in the work of the stations throughout the country. He also compiles and publishes such of the results of the station experiments as may be deemed necessary.

The Chief of the Bureau of Animal Industry investigates the existence of dangerous contagious diseases of live stock, superintends the measures for their extirpation, and makes original investigations as to the nature and prevention of such diseases ; has charge of the quarantine stations for cattle, and reports on the animal industries of the country.

The Pomologist collects and distributes information in regard to the fruit industry of the United States and the best means for its improvement.

The Chief of the Division of Vegetable Pathology investigates the diseases of plants, and seeks to determine remedies for their mitigation and prevention.

The Chief of the Division of Forestry is occupied with experiments and reports regarding forestry ; with the distribution of seeds of valuable economic trees, and with the dissemination of information upon forestry matters.

The Microscopist makes investigations relating to parasitic growths ; to the characteristics of fibres, and to the adulteration of foods.

The Seed Division collects new and valuable seeds and plants for propagation in this country and distributes them to applicants, who are required to furnish the department with a report as to results obtained with seeds so furnished them.

The publications of the Department of Agriculture consists of an  
Annual Report.

Special Reports on various subjects, published from time to time.

Bulletins by the Divisions of

Botany, Chemistry, Statistics, Entomology, Forestry, Pomology and Experiment  
Stations.

Periodical Bulletins entitled :

“Insect Life,” “North American Fauna,” “Journal of Mycology,” and “Contributions from the U. S. National Herbarium.”

## The Weather Bureau.

Professor MARK W. HARRINGTON, Chief.

The Weather Bureau, which was transferred to the Department of Agriculture on July 1, 1891, has its office at the corner of Twenty-fourth and M streets northwest, immediately adjoining the grounds of the Columbia Hospital.

The Library, under the management of Mr. O. L. Fassig, containing 11,000 volumes and 3,000 pamphlets; the Instrument Room, under Professor C. F. Marvin, and the Indications Room will be found interesting to visitors.

The observations made daily at 8 a. m. are displayed on a printed map with accompanying predictions for the next thirty-six hours, and will be furnished by 11 a. m. daily for the use of the American Association, the Geological Society of America, and the International Congress of Geologists.

## Post-Office Department.

Honorable JOHN WANAMAKER, Postmaster-General.

This department occupies a massive structure opposite the Department of the Interior. It covers an entire square bounded by E and F and Seventh and Eighth streets. It is built of white marble. The main feature of interest is the dead-letter office, to visit which a pass from the Chief Clerk is necessary.

## Department of Justice.

Honorable WILLIAM H. H. MILLER, Attorney-General.

This department is situated on Pennsylvania avenue, between Fifteenth street and Lafayette Square. It is four stories high and built of Potomac Seneca redstone. The office of the Attorney-General contains a gallery of portraits of all the Attorneys-General of the United States since the foundation of the government. The Court of Claims occupies the first floor of the building.

## The Smithsonian Institution.

Professor S. P. LANGLEY, Secretary.

The Smithsonian Institution is supported by a permanent fund at present amounting to \$703,000, the accumulations of a bequest to the United States made in 1826 by James Smithson, a scientist of England, "to found at Washington under the

name of the Smithsonian Institution an establishment for the increase and diffusion of knowledge among men." Some years were occupied in securing the bequest and in perfecting plans for carrying out its provisions. By Act of Congress, August 10, 1846, the Institution was created as an "Establishment," of which the President and the other principal officers of the general government were made ex-officio members, while the direction of affairs was intrusted to a Board of Regents "to be composed of the Vice-President, the Chief Justice of the Supreme Court, (the Mayor of Washington), three members of the Senate, and three members of the House of Representatives, together with six other persons other than members of Congress, two of whom shall be resident in the City of Washington, and the other four shall be inhabitants of some state, but no two of the same state."

The plan of organization adopted contains the following propositions :

"I. To increase knowledge. It is proposed to stimulate men of talent to make original researches by offering suitable rewards for memoirs containing new truths.

"II. To increase knowledge. It is also proposed to appropriate a portion of the income annually to special objects of research under the direction of suitable persons.

"III. To diffuse knowledge. It is proposed to publish a series of periodical reports giving an account of the progress of the different branches of knowledge.

"IV. To diffuse knowledge. It is proposed to publish occasionally separate treatises on subjects of general interest."

A further part of the plan contemplated the formation of a Library, a Museum and a Gallery of Art.

While the developments of the past forty-five years have been greater in some directions than in others, the original plan has been consistently followed with highly gratifying results.

The chief administrative officer of the Institution is the Secretary, a position which has been occupied by only three persons, namely, Joseph Henry, Spencer F. Baird and Samuel P. Langley. The Assistant Secretary is the officer in charge of the National Museum.

The Smithsonian Building is situated in that division of the Mall, between Seventh and Twelfth streets, known as Smithsonian Park. It was built, 1847-1856, at a cost of \$450,000, after designs by Renwick. The style is termed "Norman" or "Romanesque," and the material is a lilac-gray freestone, found in the red sandstone formation about twenty-three miles above Washington. The building contains at present the administrative offices, reading room, the exchange department, and several collections of the National Museum, notably those of birds, shells and archaeological specimens.

The Library of the Smithsonian Institution consists of more than 250,000 volumes and parts of volumes. It is for the most part deposited in the Congressional

Library, but each department of the Institution and the National Museum is supplied with such books as relate to its special work. The collection of the publications of scientific societies and of scientific periodicals is very large.

The Smithsonian Bureau of International Exchanges, which was early instituted, has accomplished a great work in distributing in this country and abroad the government publications, and the publications of scientific and literary societies of almost every country in the world. By its agency the Smithsonian Library has been enriched with many rare works of reference, and the publications of the Institution have been scattered far and wide. The general government has now assumed the support of this Bureau, and has made the Institution its agent in distributing all government scientific publications to foreign countries. An idea of the magnitude of the work may be formed from the statement that more than 90,000 packages, representing over 100 tons of books, pass through the Bureau each year. Over 16,000 correspondents, societies and individuals, are upon the exchange list.

The Smithsonian Institution is charged by Congress with the expenditure of the sums annually appropriated for the Bureau of International Exchanges, the Bureau of Ethnology, the National Museum, and the National Zoological Park.

PUBLICATIONS.—The Smithsonian Institution has three classes of publications :

*First*—"Contributions to Knowledge," a quarto series, in which are included memoirs giving new facts obtained in original research.

*Second*—"Miscellaneous Collections," an octavo series, containing practical papers or treatises, such as systematic lists of species in the animal, vegetable or mineral kingdoms, tables of natural constants, scientific bibliographies, and other summaries.

*Third*—"Annual Reports," an octavo series, containing the yearly report of the Secretary to Congress of work done, and supplemented by short papers upon the most important scientific discoveries of the year, by bibliographies of current literature, and by accounts of progress in various sciences.

In the Park near the northwestern corner of the building is a bronze statue to the memory of Joseph Henry, the first Secretary, to whose wise guidance the Institution owes a large share of its prosperity.

## The National Museum.

G. BROWN GOODE, Assistant Secretary.

The National Museum is maintained by annual Congressional appropriations which are expended under the direction of the Smithsonian Institution, and the Assistant Secretary of the latter is in charge of the Museum. The Museum originated in 1840, when the National Institution was organized, and the collection of the Wilkes expedition constituted its nucleus. In 1849 a museum was established by the Smithsonian



Institution, and this, in 1858, was made the repository of all the scientific collections of the government, including those of the National Institution. It acquired very large collections from various sources at the close of the Centennial Exposition, in 1876, and from that time has been recognized as the National Museum of the United States. The large accessions in 1876 led to the erection of the present museum building (1879-1881), but the additions since its occupation are sufficient to fill a much larger building than the present one. Out of thirty-three departments and sections there are seven to which no room for exhibition purposes can be assigned in the Museum building for lack of space. To some of these departments, however, have been allotted inadequate accommodations in the Smithsonian building.

No official guide to the collections has yet been published, although the curators of several of the departments have prepared hand-books descriptive of the collections under their charge. On the right, at the entrance to the Museum, is a bureau of information for the guidance of visitors.

The following is a list of the Scientific Departments in the Museum :

- I. †Arts and Industries|| : G. Brown Goode,\* Assistant Secretary, acting as curator.
- II. †Ethnology : Otis T. Mason, curator.  
‡ American Aboriginal Pottery : Wm. H. Holmes,\* curator.
- III. † Prehistoric Anthropology : Thomas Wilson, curator.
- IV. † Mammals : F. W. True, curator.
- V. † Birds : Robert Ridgway, curator.  
‡ Birds' Eggs : Capt. Charles E. Bendire,\* curator.
- VI. Reptiles : Dr. Leonhard Stejneger, curator.
- VII. † Fishes : Tarleton H. Bean,\* curator.
- VIII. † Vertebrate Fossils : O. C. Marsh,\* curator.
- IX. † Mollusks : W. H. Dall,\* curator. R. E. C. Stearns, adjunct curator.
- X. † Insects : C. V. Riley,\* curator.
- XI. Marine Invertebrates : Richard Rathbun,\* curator.
- XII. † Comparative Anatomy : Frank Baker,\* curator.
- XIII. † Invertebrate Fossils :  
    *Palaeozoic*—C. D. Walcott,\* curator.  
    *Mesozoic*—C. A. White,\* curator.  
    *Cenozoic*—W. H. Dall,\* curator.
- XIV. † Fossil Plants : Lester F. Ward,\* curator.
- XV. § Botany : Dr. George Vasey,\* curator, Botanist of the Department of Agriculture.
- XVI. † Minerals : F. W. Clarke,\* curator.
- XVII. † Geology : George P. Merrill, curator.

|| This department at the present time includes twelve different sections, each of which is under the charge of a curator, or an assistant acting as a curator.

\* Honorary.

† Departments with exhibits in the Museum building.

‡ Departments with exhibits in the Smithsonian building.

§ The National Herbarium is for the present kept in the building of the Department of Agriculture.

For information regarding the general collections of the National Museum the visitor is referred to a guide: "The Smithsonian, the National Museum and the Zoo," to be purchased (25c.) in the rotunda of the Museum. This book is not an official publication. For the geological collections, the arrangement of which has recently been changed, the visitor should secure the preliminary hand-book of the department of geology by the curator, G. P. Merrill. The Geological Department embraces both economic and general geology. In the Mineralogical Hall are the systematic mineral collection, a collection of gems and precious stones and one of meteorites.

The publications of the National Museum embrace the "Proceedings," the "Bulletins" and the "Annual Report," which forms the second volume of the Smithsonian Report, and whose appendix contains many scientific papers.

## Bureau of Ethnology.

Major J. W. POWELL, Director.

The Bureau of Ethnology was organized in 1879, and was placed under the direction of Major J. W. Powell, Director of the Geological Survey. In its early years it was so closely associated with the Geological Survey that its work was and still is often confounded with the work of that Bureau. It is, however, a separate and distinct organization supported by specific appropriations made by the general government, and the general supervision of its scientific work is confided to the Secretary of the Smithsonian Institution. The appropriation for the current year is \$50,000.

The work of the Bureau comprises the whole field of North American Ethnology, including Archeology; and the range of its work extends from Alaska on the north to Panama and the Isthmus of Darien on the south. Its collections are deposited in the National Museum, and those branches of Indian art to which it has especially devoted attention are now illustrated by collections of specimens which compare favorably with those of the largest museums. Its collection of aboriginal American Pottery, now in the National Museum, is notably the largest and finest in existence.

The publications of the Bureau comprise Annual Reports, to which are appended papers upon subjects of general interest, a series of Bulletins, consisting of reports upon special subjects, and Quarto Contributions to North American Ethnology. These publications are distributed through the exchange system of the Smithsonian Institution.

The office of Major Powell is in the Geological Survey Building, No. 1330 F street northwest.

## The U. S. Commission of Fish and Fisheries.

Colonel MARSHALL McDONALD, Commissioner.

The Commission was established primarily with the object of determining the cause of decrease among food-fishes, and of suggesting measures for the improvement of the fishing grounds. Its scope, however, has been rapidly enlarged to cover all matters pertaining to fisheries which come within the jurisdiction of the general government, including the propagation of useful fishes and the methods and statistics of the fishing business. Colonel Marshall McDonald, the present Commissioner, succeeded Professor Spencer F. Baird, upon the death of the latter in 1887.

The work of the Commission is arranged under three divisions, as follows: The Division of Scientific Inquiry is charged with the investigation of the fishing grounds relative to their resources and characteristics, their depletion and the methods suited to their replenishment; and also with the study of the habits and development of fishes as a basis for fish culture, legislation and fishery methods. The Division of Fish Culture undertakes the propagation of food-fishes, their distribution to different localities, the restocking of exhausted grounds, and the introduction of useful foreign species. The Division of Fisheries considers the methods and apparatus of the fishermen with a view to their improvement, and collects the statistics of the different branches of the business.

The investigations along the seacoasts are chiefly carried on by means of two steamers, the Albatross and Fish Hawk, and one sailing vessel, the schooner Grampus. The Albatross is now stationed on the Pacific coast, the Fish Hawk and Grampus on the Atlantic coast; the two latter vessels being also employed to some extent in fish culture. There are two marine stations for the hatching of cod, mackerel, lobsters and several other salt-water species, one located at Wood's Holl, the other at Gloucester, Massachusetts. The former is also adapted to scientific inquiries, being provided with large and well equipped laboratories for biological and physical research. A number of fresh-water and anadromous fishes are propagated upon a very exhaustive scale, the most important being the shad, lake whitefish, carp, Atlantic and Pacific salmon and several species of trout. For conducting this work twenty-one stations have been established in different parts of the country, each embodying the most approved methods applicable to the branch of fish culture for which it is adapted. Several cars, specially constructed for that purpose, are used for the distribution of the eggs and fry as well as the adult fishes.

The officers of the Commission are located in Armory Square, Washington (B street southwest, between Sixth and Seventh streets). The same building contains a biological laboratory, extensive aquaria for the study and display of salt and fresh-water fishes, and also one of the principal shad-hatching stations, for which the supply of eggs is obtained from the important fisheries of the Potomac river during the spring.

Large ponds for the breeding of German carp are situated on the Mall near the Washington Monument. Tench, golden ide and goldfish are also produced there in small numbers, and one of the ponds now contains about 2,000,000 shad fry of the last season's hatching.

Collections illustrating the work of the Fish Commission are exhibited by the National Museum. The models of fishing boats, fishing apparatus and the Cetaceans are displayed in the Museum building, and the fishes, mollusks, crustaceans and lower marine invertebrates in the Smithsonian building, where a large part of the zoological material obtained during the investigations of the Commission is also stored.

## Educational Institutions.

*Georgetown University* is the oldest educational institution of the Catholic Church in America. Founded in 1789; incorporated as a university in 1815. Has collegiate, law and medical departments. President, Rev. J. Haven Richards, S. J.

*The Columbian University* was incorporated by Act of Congress February 9, 1821, as a college and re-incorporated as a university in 1873. It has collegiate, law and medical departments. Its main building is that within which the meetings of the Congress of Geologists are held, corner of H and Fifteenth streets northwest. President, Dr. J. C. Welling.

*Howard University* is devoted to the higher education of the colored race. It was founded in 1867, and is supported by the Government. It has a collegiate department, and schools of theology, law and medicine. The average attendance is 300. President, Rev. J. E. Rankin.

*Catholic University of America.* Founded in 1889. Situated at Brookland, a suburb of the city, east of the Soldiers' Home. Is reached by the Metropolitan Branch of the Baltimore and Ohio Railroad. The Divinity School is the only department at present organized. The Rector is the Rt. Rev. John J. Keane, D.D.

*Columbia Institution for the Deaf and Dumb and National Deaf Mute College.* This institution has two departments, a primary and a collegiate; the former established in 1857, the latter in 1864. It is supported by Congressional appropriations. The development of the institution has been from the first under the guidance of Dr. E. M. Gallaudet, now President of the Faculty. This college is the only one in the world for deaf mutes. It is situated just beyond the northeastern boundary of the city in the park called Kendall Green, a portion of the estate of Amos Kendall, the original promoter of the school and its first President.

## Government Printing Office.

THIS building is situated on the corner of North Capitol and H streets. It is 300 feet long on H street and four stories high. All the printing and binding ordered by the Legislative, Executive and Judicial Departments of the Government is done in this building. It is the largest establishment of the kind in the world. Open from 8 a. m. to 5 p. m.

## Libraries of Washington.

THE Libraries of the General Government have arisen from the exigencies of public business, and with the growth of new bureaus the formation of separate reference libraries has become necessary. With few exceptions these libraries have been formed with reference to the special need of bureaus, and though small are very complete in their own subjects.

### Library of Congress.

THE Library of Congress dates from the first meeting of Congress in the City of Washington in 1800; it was burned by the British in 1814; was replaced by the purchase of Jefferson's Library and grew to contain about 55,000 books in 1851, when a fire destroyed all but 20,000 books. Since 1852 it has grown steadily and of late rapidly. In 1866 the books accruing to the Smithsonian Institution by exchange were diverted to the Library of Congress, and in 1867 the large historical collection of Peter Force was purchased and added to it. It now numbers about 650,000 volumes.

### House of Representatives.

THE Library of the House of Representatives is almost exclusively of a documentary character, containing legislative and executive volumes for the use of members of the House. Including duplicates it numbers 125,000 volumes.

### Senate.

THE Library of the Senate was begun in 1852, and consists entirely of public documents for the use of Senators. At present it contains 47,000 volumes.

## Executive Mansion.

THE Library of the Executive Mansion is very like a miscellaneous family library. It began to accumulate in the time of President Madison and now contains about 4,000 volumes.

## State Department.

THE Library of the State Department dates from the organization of the government, in 1789. It is made up of works on the laws of nations, diplomatic and general history, voyages and cognate subjects, and contains 50,000 volumes and 3,000 pamphlets.

THE BUREAU OF AMERICAN REPUBLICS has collected about 1,100 volumes relating to the Spanish republics of this continent, with special reference to all questions of international comity and commerce.

## Treasury Department.

THE General Library of the Treasury is for the entertainment of Treasury Department clerks and is mainly biography, history and fiction. It contains 18,000 volumes.

THE BUREAU OF STATISTICS began in 1866 to collect the statistical publications of the world, and now contains 5,000 volumes and 6,500 pamphlets.

THE COAST SURVEY Library contains about 8,000 volumes and 7,000 pamphlets of highly special character. Its archives contain about 5,000 original manuscript maps and 65,000 record books of observation, computation and reduction. Its collection of foreign maps and charts numbers 9,000.

THE LIGHT-HOUSE BOARD has a library begun in 1852, and containing now 3,496 volumes on light, sound, naval architecture and engineering.

THE MARINE HOSPITAL BUREAU has a library of 1,500 books and 1,000 pamphlets.

## War Department.

THE General Library of the War Department was begun in 1832 under Secretary Lewis Cass. It is devoted chiefly to military science and contains 30,000 volumes.

THE Library of the ORDNANCE BUREAU is devoted to military engineering, gunnery and military and civil law. It contains 3,000 volumes.

THE Library of the SURGEON-GENERAL'S OFFICE has been formed since the war of 1861-'65, and is practically the medical section of the Library of Congress. It covers the entire field of medical and surgical literature, and contains 101,969 volumes and 152,225 pamphlets.

THE SOLDIER'S HOME has a library dating from 1850. It is of a miscellaneous character and contains 5,632 volumes.

The Library at the ARMY HEADQUARTERS, begun by General Grant and added to by Generals Sherman and Sheridan, is of considerable value for its especial purpose.

### Navy Department.

THE General Library of the Navy Department is made up of historical, scientific and legal works with especial relation to naval affairs. It numbers 24,086 volumes and 1,000 pamphlets.

THE BUREAU OF MEDICINE AND SURGERY has a library of special reference works of a medical and scientific character, which numbers 15,998 volumes.

THE HYDROGRAPHIC OFFICE library was begun in 1867, and is made up of hydrographical, nautical and meteorological works ; it contains about 3,000 volumes and 2,000 pamphlets.

The Library of the NAVAL OBSERVATORY dates from the founding of the Observatory in 1843. It is a collection of the best works relating to astronomy, mathematics and geodesy, and numbers 13,000 volumes and 3,000 pamphlets.

### Post-Office Department.

BUT a small portion of the library of the Post-Office Department is general literature. It consists of public documents pertaining to the duties of the office, and numbers 8,000 volumes.

### Interior Department.

THE Library of the Interior Department was begun in 1850, and is made up of miscellaneous literature for the use of Department clerks. It has 10,500 volumes.

The Library of the BUREAU OF EDUCATION was begun in 1870, and contains books and journals on educational topics, and school reports of all the world, to the number of 17,500 volumes.

THE GENERAL LAND OFFICE Library contains the laws and documents relating to the public domain, and numbers 3,000 volumes.

THE COLUMBIA INSTITUTION FOR THE DEAF AND DUMB has a collection of works relating to the instruction of the deaf and dumb surpassed by only one other in the world. It numbers 4,000 volumes.

THE Scientific Library of the PATENT OFFICE was begun in 1839, and contains a very fine collection of works in all departments of science and all reports needed for reference in determining questions concerning inventions. It numbers 50,000 volumes.

The Library of the GEOLOGICAL SURVEY is not yet ten years old, but has already a practically complete collection of official geological reports and of the standard works on geology and its cognate subjects to the number of 30,000 volumes, 40,000 pamphlets and 22,000 maps.

## Department of Justice.

THE Library of the Department of Justice was begun in 1853, and forms an excellent collection of American, English, Spanish-American and Roman law books. It contains 20,000 volumes.

The Library of the SOLICITOR OF THE TREASURY dates from 1843, and is made up wholly of law books and official documents for reference to the number of 7,000 volumes.

## Department of Agriculture.

THE Department of Agriculture has a collection of works on agriculture and natural history, and their kindred branches, to the number of 24,000 volumes and 8,000 pamphlets.

The Library of the WEATHER BUREAU was begun in 1871. It is made up entirely of books on meteorology, telegraphy and cognate subjects to the number of 12,000 books and 2,500 pamphlets.

These libraries of the General Government contain more than 1,248,761 books and 228,225 pamphlets, most of which are accessible to any student in legitimate scientific study.

## Society Libraries.

Among important libraries not governmental should be noticed the following : The American Medical Association Library, which contains 7,000 volumes, the Law Library of the Bar Association, which numbers 7,000 books, the Library of the Supreme Council 33°, a collection especially rich in works of history, religion, philosophy and folk-lore to the number of 15,000, which though especially intended for and free to all masons is yet accessible to every student ; the Masonic Library of 3,000 volumes and the library of the Young Men's Christian Association numbering 2,000 books.

## School Libraries.

CARROLL INSTITUTE has a select library of 3,000 volumes ; Columbian University has a miscellaneous collection of 6,000 books and 2,000 pamphlets ; Georgetown College possesses the fine Riggs Library of 35,000 volumes and of very broad scope ; Gonzaga College and St. John's College have special libraries of 10,000 and 4,000 volumes respectively ; and Howard University has 15,000 books, among which are some rare Americana.

A general table of Washington libraries is here given :



## Washington Libraries.

	Books.	Pamphlets.
Academy of the Visitation, - - - - -	1,000	
American Medical Association, - - - - -	7,000	
Bar Association, - - - - -	7,000	
Bureau of Education—Gov't, - - - - -	17,500	
Bureau of Medicine and Surgery—Gov't, - - -	15,998	
Bureau of Ordnance (Navy Dept.)—Gov't, - - -	3,000	
Bureau of Statistics (Treas. Dept.)—Gov't, - - -	5,000	6,500
Carroll Institute, - - - - -	3,000	
Coast and Geodetic Survey—Gov't, - - - - -	8,000	7,000
Columbia Institution for Deaf and Dumb, - - -	4,000	
Columbian University, - - - - -	6,000	2,000
Department of Agriculture—Gov't, - - - - -	24,000	8,000
Department of Justice—Gov't, - - - - -	20,000	
Department of State—Gov't, - - - - -	50,000	3,000
Department of the Interior—Gov't, - - - - -	10,500	
District of Columbia—Gov't, - - - - -	2,000	
Executive Mansion—Gov't, - - - - -	4,000	
General Land Office—Gov't, - - - - -	3,000	
Geological Survey—Gov't, - - - - -	30,000	42,000
Georgetown College, (Riggs Library), - - - -	35,000	
Gonzaga College, - - - - -	10,000	
Government Hospital for the Insane—Gov't, - -	2,480	
Health Department, D. C.—Gov't, - - - - -	2,000	
House of Representatives—Gov't, - - - - -	125,000	
Howard University, - - - - -	15,000	
Hydrographic Office—Gov't, - - - - -	3,000	2,000
Library of Congress—Gov't, - - - - -	650,000	200,000
Library of Supreme Council 33° southern jurisdic- tion U. S. A., - - - - -	15,000	
Light Battery C, 3d Artillery - - - - -	2,000	
Light-House Board (Treas. Dept.)—Gov't, - - -	3,496	
Marine Hospital Bureau—Gov't - - - - -	1,500	1,000
Masonic Library, - - - - -	3,000	
Nautical Almanac Office—Gov't, - - - - -	1,600	
Naval Observatory—Gov't, - - - - -	13,000	3,000
Navy Department—Gov't, - - - - -	24,086	1,000
Patent Office Scientific Library—Gov't, - - -	50,000	
Post-Office Department—Gov't, - - - - -	8,000	

## Washington Libraries (Continued.)

	Books.	Pamphlets.
St. John's College. - - - - -	4,000	
Senate—Gov't, - - - - -	47,000	
Soldiers' Home—Gov't, - - - - -	5,632	
Solicitor of the Treasury—Gov't, - - - - -	7,000	
Surgeon General's Office, U. S. Army—Gov't, -	101,969	152,225
Treasury Department—Gov't, - - - - -	18,000	
War Department—Gov't, - - - - -	30,000	
Weather Bureau—Gov't, - - - - -	12,000	2,500
Young Men's Christian Association, - - - - -	2,000	
<hr/>		<hr/>
Total, - - - - -	1,362,761	230,225

## Private Libraries.

THE existence of this vast body of literature in the city has naturally operated against the formation of great private libraries in Washington, but there are nevertheless some worthy of notice.

The historical library of the late George Bancroft, the general libraries of Justice Joseph Bradley, Justice Horace Gray, Mr. Henry Adams, Col. John Hay and Mr. John G. Nicolay, the musical library of Mr. Edward Clarke, the Scotch library of Mr. Wm. R. Smith, the library of Americana of Mr. L. A. Brandenburg, and the collection of books relating to the civil war of 1861-'65 which Mr. John Davenport has collected, are very fine in their class.

One of the interesting collections in the city is the one made by Mr. Frederick Schneider who, in the intervals of a life as an iron founder and dealer in hardware, has through correspondence with booksellers of Europe collected a library of illustrated books, from the Nuremburg Chronicle to the present day, which contains rarities not in the great libraries. He has printed an annotated catalogue of his treasures, setting the type and doing all the press-work, etc., with his own hand.



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